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ABSTRACT

The Council of Ontario Universities Committee on Operating Grants prepared in brief on the operating support of the system. The areas discussed include the background of funding, especially the funding level for 1977-78 and interprovincial comparisons of funding; the system requirements for 1978-79 making provision for inflation, existing service level costs, productivity, predicted enrollment costs, and excess capacity; and other funding considerations, particularly other sources of revenue and the recurrent question of supplementary grants. Specific funding recommendations are made to provide funds to meet expected inflation; maintain the present levels of quality and service; and to accommodate an undergraduate enrollment increase of two percent. (JMF)

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BRIEF TO THE
ONTARIO COUNCIL ON UNIVERSITY AFFAIRS

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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FOUNDATION FOR AN UNCERTAIN FUTURE:

THE OPERATING BASE

Prepared by the

COU Committee on Operating Grants

Council of Ontario Universities
Conseil des Universités de l'Ontario

130 St. George Street
Suite 8039
Toronto, Ontario M5S 2T4

May, 1977

77-1

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COUNCIL OF ONTARIO UNIVERSITIES
CONSEIL DES UNIVERSITÉS DE L'ONTARIO

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April 26, 1977

Dr. W.C. Winegard
Chairman
Ontario Council on University Affairs
801 Bay Street
2nd Floor
Toronto, Ontario

Dear Dr. Winegard:

The Council of Ontario Universities is pleased to submit its 1977 brief on operating support to the Ontario Council on University Affairs. The brief, prepared by the COU Committee on Operating Grants, has been approved by our Council.

I have been asked to make the following comments about the brief.

1. Though the OCUA Introduction to the Third Annual Report was available early in March, it presented a picture which could be fully comprehended only when combined with the recommendations contained in Advisory Memorandum 76-VII. This memorandum was received in late March and time constraints have not permitted as full a study and reaction in our brief as we would have liked. Perhaps this area can be expanded upon at our May meeting with OCUA.

2. The brief contains no reference to the graduate studies freeze and the funding mechanisms that might follow the freeze. The meeting planned with OCUA in June 1977 has as its sole purpose the discussion of graduate studies planning and funding. We shall prepare a separate brief for this purpose.

3. Advisory Memorandum 76-VII suggested that the newly approved undergraduate funding mechanism will permit gradual phasing of possible weight changes in the BIU categories. Our brief contains no reference to weights mainly because of time constraints to develop data, and the view that thorough, joint OCUA/COU study should precede any changes. Any potential change should be reviewed in relation to the post-freeze graduate studies situation. We would welcome further discussion on this question.

4. Our brief contains no reference to the funding requirements for non-credit continuing education, which are under study at present.

5. We also have under study the special funding problems of faculties of education, and the clinical costs associated with dentistry, veterinary medicine and optometry.

6. The covering letter to our brief on capital financing makes reference to the possibility that a "trade-off" between operating and capital funding for 1978-79 might be seen as necessary by government. Our Council has taken the position that operating needs should be given priority, up to the level recommended in this brief.

We look forward to our meeting with you on May 14, 1977.

Sincerely,

G. Edward Monahan

for Edward J. Monahan
Executive Director

EJM:jf

1.0 BACKGROUND ON FUNDING

1.1 Level of Funding for 1977-78

In November, 1976 the Minister of Colleges and Universities announced that the base funding of the universities from government in 1977-78 would be $686.3 million. This represented an increase of $51.3 million over the 1976-77 level (an 8.1% increase). As well, the tuition fees charged to Ontario students were to be increased at an annual rate of $100 per student (or $150 for three-term registration). It was estimated that the increase in income generated by raising tuition fees would be $20 million. Coupling this with an expected increase in tuition income due to enrolment growth, it was assumed that an additional $28.3 million in university revenue would be provided from tuition fees.

The combination of these increases ($79.6 million) matched the level of increase recommended by the Ontario Council on University Affairs in its funding advice to government. Last year's COU brief recommended an increase of $90.4 million for 1977-78. Table 1-1 was prepared in order to compare how the two recommendations differed. The major differences highlighted by Table 1-1 are as follows:

1) Even though an additional $3.5 million in funds was granted to assist with "the pressing financial needs of the system", the total level of support for inflationary costs in non-salary

items still fell substantially below the COU request, which documented forecasts suggest was conservative.

2) OCUA discounted for "productivity" the funds provided for inflation, progress through the ranks, and maintenance of

Table 1-1

Percentage Increases in Operating Grants for 1977-78 Comparing OCUA Recommendations and COU Requests

	1 1976-77	2 Inflationary Trend Cost 1977-78	3 Existing Service Level Cost 1977-78	4 Efficiency Factor (Negative)	5 Predicted Enrolment Costs 1977-78	6 Excess Capacity Factor (Negative)	7 Cost of Basic Objectives 1977-78
OCUA[1]							
Salaries	100.0%	6.2	2.1	-1.1	5.0	-2.5	109.8%
Fringe Benefits	100.0	6.0	2.1	-1.1	4.8	-2.4	109.4
Non-Salary	100.0	7.0[2]	2.6	-1.1	4.9	-2.4	111.0
TOTAL	100.0%	6.4	2.2	-1.1	5.0	-2.5	110.0%
COU[3]							
Salaries	100.0%	6.3	2.0	-0-	4.5	-1.6	111.2%
Fringe Benefits	100.0	6.4	2.0	-0-	4.6	-1.6	111.3
Non-Salary	100.0	10.4	1.0	-0-	4.5	-1.6	114.4
TOTAL	100.0%	7.1	1.8	-0-	4.5	-1.6	111.9%

1. Ontario Council on University Affairs Advisory Memorandum 76-III, p. 6.
2. Includes the additional $3.5 million for pressing financial needs of the system.
3. Approach to the Eighties: Demand/Quality/Resources, Brief to the Ontario Council on University Affairs, Council of Ontario Universities, Revised September, 1976, p. 60.

service and quality; no such discount was utilized by COU. In this instance, evidence presented in the present brief suggests that the OCUA action was unjustified.

3) The excess capacity factor subtracted from enrolment growth (again a productivity discount) was arbitrarily set at 50% by OCUA; the COU request allowed a 35% discount due to the savings related to semi-fixed and variable costs.

The 1977-78 allocation announcement by the Minister in February[1] set the Basic Income Unit (BIU) value at not less than $2,519 compared to $2,312 for 1976-77, and the Graduate Funding Unit (GFU) value at not less than $2,457 compared to $2,255, increases of approximately 9%. Subsequently, in March, the BIU value was raised to $2,525 and the GFU value to $2,461, the increase being provided from an unrequired contingency fund which had been set aside for actual enrolment growth beyond that which was predicted.

Northern grants grew 14.8% to $2.917 million; bilingualism grants were up 11.5% to $4.228 million; while supplementary grants were reduced $850 thousand (24.3%) to $2.65 million. The total of Basic Operating Income (BOI)[2] and these extra formula grants is expected to increase 9.3% between 1976-77 and 1977-78 to $814.7 million.

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[1] Based on OCUA Advisory Memorandum 76-VI.

[2] Government grants plus formula tuition fees.

Even though the OCUA attempt to rationalize the level of funds for 1977-78 was appreciated by the university community, there was, of course, disappointment that it was not possible for the increase to match the level of support which the universities felt was necessary in order to meet the financial demands placed on them.

1.2 Interprovincial Comparisons

A synopsis of the report comparing the provinces on operating grants per full-time equivalent student was included in last year's brief. Actual results from 1971-72 until 1973-74 showed that Ontario's rank order position had fallen from third in the nation to sixth position. It was also reported that even though Ontario began in the comparison above the national average (+$55 per student), the province was $45 per student below the national average by 1973-74. Preliminary future data indicated no improvement for Ontario but rather indicated further decline.

The actual results for 1974-75 and 1975-76 (presented in Table 1-2) have been used to create Table 1-3. This updated comparison substantiates the conclusions drawn from the preliminary data, and shows that Ontario was below the national average by $208 in 1974-75 and fell to the even lower position of $418 below the national average in 1975-76. It should also be noted that the distance between British Columbia's per student contribution and that of Ontario has grown from $573 in 1973-74 to $1,256 in 1975-76. In general, the

Table 1-2

Provincial Operating Grants and FTE Enrolment, 1974-75 and 1975-76

	Provincial Operating Grants[1] to Universities		Full-Time Equivalent[5] Students	
	1974-75	1975-76	1974-75	1975-76
Newfoundland	28,821	37,560	6,997	7,130
Prince Edward Island	5,121	5,790	1,575	1,714
Nova Scotia	52,520[2]	64,860[2]	18,788	19,960
New Brunswick	32,949	38,457	11,977	12,666
Quebec	305,522[3]	390,889[3]	85,725	93,467
Ontario	510,586[4]	593,182[4]	168,147[6]	179,341[6]
Manitoba	62,617	78,480	20,516	21,519
Saskatchewan	49,876	62,771	15,447	16,316
Alberta	108,820	139,921	32,373	34,586
British Columbia	122,928	158,632	32,808	34,760
Canada	1,279,760	1,576,542	394,353	421,435

1. Financial Statistics of Universities and Colleges, 1974-75 and 1975-76, CAUBO - Statistics Canada.
2. Adjusted 1974-75 to include N.S. College of Art & Design, Ste.-Anne's, and Cape Breton at $7,206 (1975-76 = $7,931).
3. Adjusted 1974-75 to include Ecole Nationale D'Administration Publique at $3,002 (1975-76 = $3,580).
4. Adjusted to include Algoma, Thornloe, McMaster Divinity, St. Augustine's, Queen's Theological, Knox, Wycliffe, Conrad Grebel, Renison, St. Paul's, St. Jerome's, Regis, and Dominican at $3,159 in 1974-75 and $3,109 in 1975-76.
5. Advance Statistics of Education, 1976-77, Statistics Canada.
6. Adjusted by excluding Centre for Christian Studies, Ontario Bible College, Richmond and RMC.

Table 1-3

Provincial Grants to Operating Revenue per FTE Student, 1974-75 and 1975-76

	1973-74[1] Rank	1974-75[2]	Rank	1975-76	Rank[2]
Newfoundland	2	$4,119	1	$5,268	1
Prince Edward Is.	10	3,251	5	3,378	7
Nova Scotia	8	2,796	9	3,249	9
New Brunswick	9	2,751	10	3,036	10
Quebec	5	3,564	3	4,182	3
Ontario	6	3,037	8	3,308	8
Manitoba	7	3,052	7	3,647	6
Saskatchewan	4	3,229	6	3,847	5
Alberta	3	3,361	4	4,046	4
British Columbia	1	3,747	2	4,564	2
Canada		$3,245		$3,726	

1. A Comparison of Provincial Contributions to Canadian Universities, COU, March, 1976.
2. Computed from Table 1-2 above.

actual results were worse than we had anticipated last year.

With Ontario's enrolment figures increasing at approximately the same rate as the rest of Canada, the difference is found in the rate of increase in operating grants. While the precision of particular figures may be open to question, the trend data are now impossible to refute, since there is little doubt that the average increases in the other provinces for university operating budgets have been significantly above those given by Ontario.

When looked at from the point of view of what Ontario provides per student in comparison to the rest of Canada (i.e. excluding Ontario), the differences cited above become even more alarming. In 1974-75, Ontario provided per student operating support at a figure 11% below the average for the rest of Canada; in 1975-76, the figure was 18% below. There is no evidence to suggest that Ontario's position has changed significantly for 1976-77.

We acknowledge that caution must be used in the interpretation of absolute differences between provinces, since their mix of institutions varies widely. It is also recognized that Ontario has a massive commitment to the support of universities, particularly since its enrolment per capita is higher than in many of the provinces. Nonetheless, the trend towards a widening gap in support per student is clear, and this is what is most relevant to the universities

in terms of the educational resources they have available.

Continuation of the present policy of financial restraint in the university sector will undoubtedly have long term implications on the quality of higher education in this province. We can therefore only question the wisdom of holding per student expenditure in Ontario at a level significantly below that of the rest of Canada.

2.0 SYSTEM REQUIREMENTS FOR 1978-79

OCUA attempts to make provision in its system funding advice for five major factors:

1) inflationary costs,
2) existing service level costs,
3) productivity,
4) predicted enrolment costs, and
5) excess capacity.

Each of these factors will be considered in the sections that follow.

2.1 Inflation

In providing advice to OCUA as to the appropriate level of funding for inflation, the Operating Grants Committee is conscious of the present uncertainty surrounding the future of the Anti-Inflation Board. The success of the Board in seeing its guidelines followed has to some extent lessened inflationary pressure on university budgets, particularly in the salary area. In the absence of any indication of the future of the AIB, we have assumed that either it will be in operation for 1978-79 or that the general thrust of its guidelines will still be respected.

We are therefore recommending that the following levels of increase be used to develop funding requirements related to inflation:

Salaries	6%
Fringe Benefits	8%
Non-Salary Items	10%

The percentage increase[3] in salaries for 1978-79 is derived from the 4% "basic protection factor" plus the 2% "national productivity factor" which would be permitted by the AIB. (Provision for "progress through the ranks" is made in Section 2.2 of the present brief, "Existing Service Levels".)

In a similar manner, the percentage increase allowed for salaries in 1977-78 should have been 6% plus 2%. The Operating Grants Committee notes that the present AIB interpretation of permissible salary increases was not available at the time of OCUA's 1977-78 funding advice. However, the exclusion of a "national productivity factor" by OCUA for 1977-78 funding provided 13.1 million fewer dollars than would be required for salary and fringe benefit increases which match the AIB guidelines.

The percentage increase in fringe benefits is above that for salaries in recognition of the finding presented later in this brief that fringe benefit costs have been increasing at a more rapid rate than salaries. Also in recognition of the pressing financial conditions that are related to energy, taxes, and furniture and equipment, the non-salary inflation component is adjusted to reflect actual need, rather than the increases targeted under the AIB guidelines.

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[3] A more precise calcuation of the required salary increase component would take into account the lap in fiscal years for those institutions which retain July 1 salary years. If the salary increase percentage in a given year is lower than the previous year, additional funds are required for the May-June period, and these funds are not provided in our estimate.

The figure of 10% for funds needed to meet inflationary pressures was derived by utilizing expected rates of inflation for the major non-salary components and weighting those inflation rates in proportion to the components' shares of expenses for the system in 1975-76 (see Table 2-1).

Table 2-1

Estimate of Non-Salary Inflation, 1978-79

	Expected Rate of Inflation	Weighted[1] Share	Weighted Inflation
1. Furniture and Equipment	8%	.15	.012
2. Utilities	19%	.17	.032
3. Books and Periodicals	12%	.10	.012
4. Operational Supplies	6%	.34	.020
5. All Other Expenses	8%	.24	.020
		1.00	.096

1. Computed from Total Revenue and Expenses for Provincially Assisted Universities of Ontario for the Fiscal Year Ended April 30, 1976, Council of Ontario Universities, 1976.

In the non-salary area, the Operating Grants Committee feels that the Consumer Price Index does not accurately reflect the impact of inflation on universities. Even though most authorities agree that neither the CPI nor the Wholesale Price Index are accurate measures, there is no general agreement in Ontario as to what would constitute a better measure of the rate of inflation for non-salary related expenses. Since other jurisdictions in both Canada and the United States have developed university price indexes, the Committee of Finance Officers - Universities of Ontario, at the encouragement of COU, has agreed to create a task force in the near

future to develop an Ontario university price index for non-salary items.

As stated earlier, we feel we have to assume that the AIB will still be in place during both 1977-78 and 1978-79 and have recommended rates of inflation that bear in mind the targets that have been set by the federal government. However, if the programme were to cease and costs were to rise above the present guideline percentage increases, the universities would face severe financial difficulties. The salary component of university expense has always been highly influenced by wage settlements in the public sector in past years. If, in the absence of controls, salary increases in the public sector rise above whatever provision OCUA makes for 1978-79, it should be anticipated that universities will require additional funding.

Therefore, the Committee recommends that if the controls of the AIB programme are lifted, government adjust the level of funds for universities upward to reflect the reality of the situation.

2.1.1 Fringe Benefits

An analysis of objects of expense as percentages of total operating expenses shows fringe benefit costs increasing from a 6.2% share in 1971-72 to a 7.7% share by 1975-76. At the request of OCUA,

COFO-UO initiated a study of fringe benefit costs to see if the disparity between the increases experienced in total salaries and increases in fringe benefits from 1974-75 to 1975-76 could be explained. Also, it was decided to see if the difference was the result of 1975-76 being an aberrant year. Universities were therefore asked to estimate such costs for 1976-77. The system totals from the survey are displayed in Table 2-2.

Table 2-2

Comparison of Fringe Benefit Costs, 1974-75, 1975-76, and 1976-77

	1974-75	1975-76	Increase Between 1974-75 & 1975-76		1976-77[1]	Increase Between 1975-76 & 1976-77	
			$	%		$	%
Total Salaries	$460,803	$526,243	$65,440	14.2	$597,087	$70,844	13.4
Pension:							
Current Service	24,899	29,106	4,207	16.9	33,181	4,075	14.0
Group Life	2,553	2,856	303	11.9	3,859	1,003	35.1
Long Term Disability	1,083	1,287	204	18.8	1,671	384	29.8
Dental	184	410	226	122.8	899	489	119.3
OHIP	3,950	4,072	122	3.1	5,723	1,651	40.5
Canada Pension	4,307	5,001	694	16.1	5,475	474	9.5
Workmen's Compensation	531	757	226	42.6	942	185	24.4
Unemployment Insurance	4,510	6,159	1,649	36.6	7,167	1,008	16.4
Other	1,240	1,264	24	1.9	1,569	305	24.1
Subtotal	43,257	50,912	7,655	17.7	60,486	9,574	18.8
Experience Deficiency	1,639	3,370	1,731[2]	105.6	2,041	(1,329)	(39.4)
Past Service Liability	2,050	2,361	311	15.2	1,939	(422)	(17.9)
Total Benefits	$46,946	$56,643	$9,697	20.6	$64,466	$7,823	13.8

1. Estimated.
2. $1,461 represents a one-time payment by Western.

Even though the expected increase in total benefit costs between 1975-76 and 1976-77 appears to be significantly lower than the increase experienced between 1974-75 and 1975-76, the results are not, in fact, dissimilar. This arises because the raw data in Table 2-2 were highly affected by the decision of the University of Western Ontario to expend in 1975-76 $1.461 million to completely cover the costs of a pension plan experience deficiency. The reported increases between years are skewed by the inclusion of this payment by Western. Because of this, contributions to past service liabilities and experience deficiencies were isolated for all years.

Disregarding these payments, we find that fringe benefits costs increased 17.7% between 1974-75 and 1975-76 and 18.8% between 1975-76 and 1976-77. During the same periods of time, total salaries increased 14.2% and 13.4% respectively. All of the results indicate that there is no consistent pattern of rates of increase for the items that comprise fringe benefit costs. However, the results do show that other than the introduction of dental plans (from five universities in 1975-76 up to nine universities for 1976-77), all other fringe benefit increases are related to changes in the rates charged to universities. Also, it is clear that fringe benefit costs are increasing at a more rapid rate than salary increases.

In its funding advice for 1976-77, OCUA provided for growth in fringe benefit costs of $5.6 million (a 10.7% increase). The

estimated expenditure results for the current year (disregarding payments for past service liabilities and experience deficiencies) will give rise to an increase of approximately $9.6 million over 1975-76 (or +18.8%). Even though OCUA, in its 1977-78 funding advice adjusted the 1976-77 base for fringe benefits to $62 million, universities presently estimate that base to be $64.5 million. The combined impact of starting at a lower than likely base and providing for a rate of inflation tied to salary increases will have significant implications for 1977-78 and subsequent years.

2.1.2 Pension Plans

There has been some concern expressed in recent years that the past funding levels of pension plans might not have been adequate to meet future demands. Recent federal legislation requires that an actuarial review be conducted every three years to make such assessments. It is next to impossible, due to the differences in the kinds of pension programmes utilized by the universities, to make any meaningful comparisons. Comparability is also made difficult by the fact that the universities do not share the same date for actuarial reviews.

Though results of a recent survey, involving consultation with university actuaries, would lead one to believe that pension plans are being adequately funded, the Operating Grants Committee

notes that allocations for experience deficiencies and past service liabilities have tended to increase at more than the rate of salary increases. Further, significant improvement in investment performance will be required to prevent the need for universities to make additional contributions to offset investment deficiencies resulting from the recent relatively poor investment market performance. This is clearly an area of increasing concern to the university community.

The age profile of members in the pension plans shows large numbers in the 35 to 45 year age group with few members approaching retirement age. One university, the University of Waterloo, indicated that a study by its consulting actuary showed that this age-mix phenomenon will likely cause the university costs to rise from a present 7.6% of pensionable earnings to the area of 8.1% to 8.3% in about five years. The average age of members in this plan will increase from the present 42.6 to about 45 years in that time. The actuary suggests that the age average should then remain constant. The additional cost to the University of Waterloo for this change, based on this year's salaries, will be about $250,000 per year.

2.1.3 The Impact of Inflation on Non-Salary Expenditure

Table 2-3 presents a six-year display of the percentage of total

university expenditures devoted to various objects of expense. Comparing the more significant percentage share changes with the five-year comparison included in last year's brief (p. 19) we construct Table 2-4.

These results again show a continuation of the phenomenon of capital consumption as a means of financing compensation levels, energy, and taxes. Given the extraordinary impact of inflation, the resources which could be allocated to the purchase of equipment and furniture and the acquisition of library materials have been reduced dramatically. These pressing financial needs, recognized in 1977-78 funding, continue to merit special attention.

2.1.4 University Library Acquisitions

In last year's brief we examined what had happened to the purchasing power of dollars made available to acquire library books and periodicals. The conclusion drawn was that the inflation rate had seriously eroded the purchasing power of the library acquisition dollar. From 1971-72 until 1974-75, the cumulative effect showed a decrease of 15% in the purchasing power.

In order to assess the actual results of 1975-76 and the projected expenditures in 1976-77 for books and periodicals, Table 2-5 was prepared. We again used a conservative estimate of a 12% rate of

Table 2-3

Percentage Analysis of Operating Expenses, 1970-71 to 1975-76

Operating Expenses by Object of Expense	12 Mths 1970-71 %	10 Mths 1971-72 %	12 Mths 1972-73 %	12 Mths 1973-74 %	12 Mths 1974-75 %	12 Mths 1975-76 %	% Change 1970-71 through 1975-76
Salaries and Wages							
Academic ranks	37.0	36.9	38.7	38.5	37.8	38.0	2.7
Other Instruction & research	4.5	5.1	4.1	4.3	4.6	4.7	4.4
Other salaries & wages	28.6	28.3	29.4	29.2	29.1	29.1	1.7
Total Salaries & Wages	70.1	70.3	72.2	71.9	71.5	71.8	2.6
Fringe Benefits	5.8	6.2	6.7	6.8	7.0	7.7	32.8
Total Salaries & Benefits	75.9	76.5	78.9	78.7	78.5	79.5	4.7
Books & periodicals	2.9	2.9	2.5	2.4	2.3	2.0	(31.0)
Furniture and Equipment							
Purchase	3.2	3.3	2.2	2.0	2.1	1.9	(40.6)
Rental	1.6	1.5	1.6	1.6	1.4	1.2	(25.0)
Operational Supplies & Expenses	7.2	7.2	6.3	6.2	7.2	6.9	(4.2)
Utilities	3.0	3.3	3.3	3.3	3.4	3.4	13.3
Taxes	0.7	0.7	0.7	1.2	1.1	1.1	57.1
Renovations & Alterations	1.5	1.0	1.0	1.0	0.8	1.0	(33.3)
Externally Contracted Services	0.8	0.8	1.0	1.1	0.9	1.0	25.0
Scholarships, bursaries, etc.	0.2	0.3	0.4	0.5	0.6	0.5	150.0
Principal & Interest Payments	0.2	0.1	0.1	0.1	0.1	0.1	(50.0)
Miscellaneous	3.6	3.2	3.0	2.7	2.7	2.2	(38.8)
Internal Cost Allocations	-0.8	-0.8	-1.0	-0.9	-1.1	-1.0	25.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	

Source: Total Revenue and Expenses reports.

Table 2-4

Comparison of Change in Percentage Share of Total Operating Expenses

	5 Yr. % Share Change[1]	6 Yr. % Share Change[1]
Salaries and Wages	2.0	2.6
Fringe Benefits	20.7	32.8
Books and Periodicals	(20.7)	(31.0)
Utilities	13.3	13.3
Taxes	57.1	57.1
Furniture Purchase and Rental	(27.1)	(35.4)

1. Computed from Table 2-3.

Table 2-5

Erosion of the Purchasing Power of Dollars Spent on Library Acquisitions

	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
Total System Funds in $000[1]	$11,048	$12,088	$12,386	$13,349	$13,867	$14,084
Purchasing Power of Library Dollar[2]	$1.00	.975	.880	.838	.756	.656

1. From Total Revenue and Expenses reports up to 1975-76; 1976-77 estimated; Wilfrid Laurier, OISE, and Ryerson excluded in order to have comparable data base.

2. Increases in available funds deflated @ 12% per annum.

inflation[4]. The results show that the purchasing power fell 8.2 points between 1974-75 and 1975-76 to 75.6¢ (1971-72 = $1.00) and is anticipated to fall another 10 points by the end of 1976-77.

It would appear that the rate of decline has not been abated in recent years. Despite the major effort being made by universities to increase the effectiveness of library expenditure, it is clear

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[4]The prices of American periodicals have risen 134% in eight years and rose 13% in 1975-76 (Library Journal, Vol. 101, No. 14, August, 1976, pp. 1600-1605). The prices of American hardcover books rose at a less rapid rate, which varied from 3% to 11% depending on the subject matter (Publisher's Weekly, Vol. 211, No. 7, February 14, 1977, pp. 52-56). British journals rose by 27% while hardcover books rose 42%. Other journals have risen 22% (Library Association Record, Vol. 78, No. 6, June, 1976, pp. 249-250). The long term impact of the change in the value of the Canadian dollar is difficult to estimate but the decline of the dollar to its present level has clearly added an additional burden to acquisition budgets.

that the acquisitions of Ontario university libraries will, without sufficient funding, continue to deteriorate to such an extent as to seriously affect teaching activities and scholarly research. This area may require special study and perhaps special funding to make up for lost ground.

2.1.5 Cost of Utilities

Costs related to all forms of energy consumption have been escalating at a rapid pace over the last few years. At the beginning of the so-called "energy crisis", all responsible large consumers of energy, including Ontario's universities, responded to these rising costs by the initiation of energy conservation programmes. These programmes have grown in scope and sophistication and one could easily estimate that they have saved the universities millions of dollars every year. The support of government on energy conservation has been encouraging with the introduction of provincial grants for energy conservation in 1975-76 and the addition of the grants for operating cost savings programmes in 1976-77. It is doubtful, however, that further major reductions in energy consumption can be achieved without major capital expenditure.

In order to present as accurate a picture as possible, a special survey on utilities costs was conducted by the Committee of Finance

Officers - Universities of Ontario (COFO-UO). The survey was necessitated by the fact that utilities expenses in the regular COFO-UO reports[5] are gross figures and include costs for oil, gas, steam, electricity, water and telephone. In the present study, adjustments were made to the total operating expenses where certain segments of expense are charged out to other funds, such as ancillary enterprises. The survey excluded telephone expenses and requested each university to report the net operating cost for heat, power, and light by adjusting the 1975-76 actual figures, and to estimate these costs for both 1976-77 and 1977-78.

The results are reported in Table 2-6. System totals show that, despite the major savings achieved by energy conservation, the costs of these forms of energy are still expected to rise 21.7% between 1975-76 and 1976-77. This represents a total dollar increase of just over $4 million. A similar dramatic increase is anticipated for 1977-78 over 1976-77. Regional variations in rate structures and the timing of energy conservation programmes give rise to institutional variations.

In its system funding recommendations for 1976-77[6], OCUA requested a total increase in the non-salary items of $15.7 million over the 1975-76 level. Of this, $1.6 million[7] attributed to existing levels of service was felt by OCUA to be applicable only to furniture and equipment replacement and therefore just $14.1 million was available for other non-salary increases. The $4.2 million increase in utility

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[5] Total Revenue and Expenses reports.

[6] OCUA Advisory Memorandum 75-VI.

[7] $4.1 million less $2.5 million efficiency factor.

Table 2-6

Comparison of Rates of Increase in Utilities[1] Expenses for Ontario Universities
(in thousands)

	1975-76	1976-77	$ Increase	% Increase	1977-78	$ Increase	% Increase
Brock	548	553	5	1.0	613	60	10.8
Carleton	1,056	1,252	196	18.6	1,434	182	14.5
Guelph	1,310	1,820	510	38.9	2,212	392	21.5
Lakehead	729	883	154	21.1	963	80	9.0
Laurentian	366	429	63	17.2	500	71	16.6
McMaster	1,523	1,799	276	18.1	2,175	376	20.9
Ottawa	1,475	1,642	167	11.3	1,902	260	15.8
OISE	108	121	13	12.0	141	20	16.5
Queen's	996	1,184	188	18.9	1,414	230	19.4
Ryerson	954	938	(16)	(1.7)	1,031	93	10.0
Toronto	4,658	5,634	976	20.9	6,904	1,270	22.5
Trent	118	137	19	16.1	176	39	28.5
Waterloo	996	1,309	313	31.4	1,638	329	25.1
Western	1,346	1,807	461	34.2	2,146	339	18.8
WLU	160	199	39	24.4	210	11	5.5
Windsor	832	1,131	299	35.9	1,388	257	22.7
York	1,942	2,436	494	25.4	2,822	386	15.8
TOTAL	19,117	23,274	4,157	21.7	27,669	4,395	18.9

1. Costs for oil, gas, steam, electricity, and water.

costs thus consumed over twenty-nine percent (29%) of funds available for all other non-salary cost increases. Since utility costs approximated 14% of non-salary costs in 1975-76, OCUA allowed about $1.8 million in this category; the actual increase in 1976-77 was well over twice that. The funding of the special OCUA recommendation of $3.5 million for 1977-78 for the "particular financial circumstances" around energy consumption, scientific equipment, and library acquisitions should be of great assistance for this one year only. The Committee is greatly

concerned that since a supplemental recommendation such as this may not be funded by government if on a discretionary basis, the increase should be included in the base calculation of system requirements.

2.1.6 Municipal Taxes[8]

The publication of the report of the Commission on the Reform of Property Taxation in Ontario in March, 1977 gives rise to concern over the levels of funds that might be required in 1978-79 to meet municipal taxation levies on the universities if its recommendations were implemented as submitted. The provincial government provided grants in lieu of municipal taxes for universities that totalled $7.54 million in 1975-76. It has been estimated that if the report were to be implemented, the costs to universities (including taxation of residence space) would rise to $80-90 million per annum. The question has been raised as to whether one could expect the provincial government to be in the position to allocate all of the requisite funds; but the more serious question would be how the universities could be expected to finance such a significant increase without the necessary increase in provincial grants.

For purposes of illustration, if the taxes paid by universities had

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[8] COU representations to the Blair Commission are attached to the present brief as an appendix. These representations appear to have had little impact on the Commission, and COU plans to reiterate the arguments in a submission to the Minister of Treasury, Economics, and Intergovernmental Affairs.

risen to $85 million in 1975-76, total operating expenses would have been approximately $800 million. Taxes would have represented 10.6% of operating expenses instead of the actual 1%. Without an additional $77 million in government grants, universities would have had to cut expenditures by this amount, which represents 52% of total expenditure on non-salary items in 1975-76.

2.2 Existing Service Levels

OCUA presently provides 2% of base salary expenditure as a means of financing progress through the ranks. The Operating Grants Committee feels this provision to be adequate and recommends that it be used in the calculation of 1978-79 funding requirements. The Committee notes, however, that several universities have expressed concern over the validity of a 2% figure. We intend therefore to undertake a study of this matter during the coming year.

In line with its advice with respect to the impact of inflation on fringe benefit costs, the Operating Grants Committee recommends use of a 2.7% figure to cover the costs of existing service levels in the fringe benefits area.

In last year's brief a great deal of attention was drawn to the serious problems which might arise from the age distribution of faculty members in Ontario universities, especially if the low rate of hirings were to continue. Aging of faculty has been recognized

as a national concern by both AUCC and the Science Council[9] and we would again direct the attention of OCUA to the issues raised in Academic Career Planning: The Ivory Tower and the Crystal Ball.[10] Clearly, further study is in order and COU, for its part, will be exploring additional avenues for research in this area.

2.2.1 Furniture and Equipment

It is quite difficult to talk about the amount of money needed to adequately fund furniture and equipment needs since we are unable to ascertain how many dollars should be spend each year on replacement, how much additional equipment and furniture is required to accommodate enrolment growth, and how much new equipment is necessitated by the introduction of technological advances. The only hard data presently available are the actual dollars spent in previous years for furniture and equipment out of operating revenues. We know that furniture and equipment expenditures rose from $20.5 million in 1974-75 to $23.1 million in 1975-76 (an increase of almost 13%), and at the same time their percentage share of total operating expenses decreased by over 8%.

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[9] AUCC and the Science Council are jointly sponsoring a conference on the aging pattern of Canada's scientific manpower in June, 1977. A background paper for that conference, which bears upon our concerns, is The New Crisis of Canadian Universities by Max von Zur Muehlen.

[10] Report of the joint COU/OCUFA Committee on the Study of Academic Career Development in Ontario Universities, May, 1976.

In order to gain another perspective on the problem, we have applied the present OCUA system funding model to measure what would have been provided for furniture and equipment in 1975-76. Factors used in the exercise were:

a) an inflation rate of 9.5% (the actual percentage increase in the CPI between December, 1974-75 and 1975-76);

b) 2.5% for the maintenance of existing levels of service discounted by 1% for productivity; and

c) enrolment growth between 1973-74 and 1974-75 of 5% (actual growth was 5.3%) discounted by 50%.

The calculation results in a provision for expenditure of $25.2 million in 1975-76; universities actually spent $23.1 million. However, it should be noted that even if the universities had spent the higher dollar amount produced by the OCUA model, furniture and equipment expenditures in 1975-76 as a percentage share of total operating expenses would have still been below the 1974-75 share. This would lead one to believe that the present assumptions by OCUA might not provide an adequate amount for furniture and equipment needs.

2.3 Productivity

The Operating Grants Committee views with considerable regret that OCUA again included a discount for productivity in its 1977-78 funding advice. Even though it is difficult to argue against productivity gains as being a worthy goal for university services, the Committee finds itself in the unenviable position of trying to rationalize what OCUA itself recognizes as an arbitrary level of discount. The Economic Council of Canada[11] found that from 1947 to 1973 only 6% of the total productivity gains in Canada were attributable to the tertiary sector, i.e. the service industries; 34% of the gains arose from the primary sector; and 60% arose from the secondary sector.

The Economic Council, in the same report, estimated that the average annual percentage change for pure productivity growth between 1975 and 1980 will be 3.1%. Assuming the above historical relationship would lead one to the conclusion that universities should be expected to show a 0.2% (0.031 x 0.06) productivity increase per annum, rather than the 1% assumed by OCUA.

Since OCUA admits being unable to justify the 1% productivity dis-

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[11] Options for Growth, Twelfth Annual Review, Economic Council of Canada, 1975, pp. 46-47.

count it has been using in its funding advice, the Operating Grants Committee recommends that, based on existing evidence, this level of discount be reduced to 0.2% per annum at most.

2.4 Analysis of Projected and Actual 1976-77 Enrolment

Before attempting to present a projection of enrolment for 1977-78, it would be helpful to briefly examine the record of success in this area during the past two years. Table 2-7 demonstrates how inexact recent projections have been. In 1975-76 the universities

Table 2-7

Comparison of Projected and Actual FTE Undergraduate Enrolments, 1975-76 and 1976-77

	Projections			Actual
	Sum of Universities	COU	OCUA	
1975-76[1]				
Number	165,146	170,768		172,946
% Increase	1.4	5.0	3.0	5.9
1976-77[1]				
Number	174,353	182,576		176,707[2]
% Increase	1.7	5.0	5.7	1.4

1. Excluding Ontario College of Art.
2. FFTE's based on November 1, 1976 count.

projected an increase of 1.4% in full-time equivalent (FTE) undergraduate enrolment. OCUA predicted an increase of 3.0% while COU in its 1975 brief estimated an increase of 5.0%.

Actual FTE undergraduate enrolment in 1975-76 showed an increase of 5.9%, higher than all of the projected values. For 1976-77 projected increases in FTE undergraduate enrolment of 1.7%, 5.0% and 5.7% were made by the universities, COU in its 1976 brief, and OCUA respectively. Preliminary reporting based on a November 1, 1976 count date, showed an actual increase in 1976-77 of only 1.4%. (At the time of writing this brief the Winter term figures were not as yet available.) Before a prediction for 1977-78 is made, enrolment increases in 1976-77 will be examined. (Throughout this section the discussion has been limited to the undergraduate sector; no growth in graduate enrolment has been assumed owing to the funding freeze. Reference to enrolment patterns will be made in the COU brief on graduate planning.)

2.4.1 Effects of New Counting Scheme

To some extent the 1.4% increase in 1976-77 is artificially low because of the introduction of a new counting scheme by MCU. There are two components of this new scheme which have an impact on the figures produced, when compared to previous years:

- change in the count dates; and

- adoption of course counting.

The first factor has had a dual effect; changing the Fall term count date from December 1 to November 1 has resulted in higher Fall term enrolment figures, while inclusion of the Winter and Spring term counts has resulted in lower figures than would have been realized under the old counting scheme. A survey of the universities had indicated that changing the count dates has resulted in a system decrease of about 0.2% in FTE undergraduate enrolment. Adoption of course counting in 1976-77 resulted in an additional estimated system decrease of 0.2%.[12] This figure is a preliminary indication, as many universities had derived their estimate before their actual Winter term enrolments had been determined.

The best estimate that can be made at this time is that the adoption of the new counting scheme has reduced the system FTE undergraduate count by approximately 0.4%. The increase in 1976-77 is then of the order of 2%, when related to past methods of counting.

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[12]The effect of changing the count dates ranged from an increase of 2.2% to a decrease of 2.1% in the universities' FTE undergraduate enrolment counts, and the impact of course counting ranged from an increase of 2.0% to a decrease of 1.5%.

2.4.2 Total FTE Undergraduate Enrolment

In order to understand what happened in 1976-77, it is necessary to be able to compare the enrolment figures with earlier years. A January, 1977 survey by COU's Committee on Enrolment Statistics and Projections (CESP) asked the universities to calculate their 1976-77 enrolments on the basis of the old MCU counting scheme. These figures are presented in Table 2-8, which shows FTE undergraduate enrolment from 1973-74 through 1976-77. In those instances where a 1976-77 adjusted figure was not available, the FTE enrolment figures, as reported to the Ministry, have been used. (The FTE enrolment is based on a doubling of the Fall term FFTE[13] count.)

The actual increase in FTE undergraduate enrolment in 1976-77 was 2%, less than half of the increase predicted in the 1976 brief. What is of greater interest is the number of large universities which showed patterns of growth below the average for the system, and in some instances recorded a decrease in FTE undergraduate enrolment. We will return to this point later. However, this apparent shortfall must be viewed in a different light if one examines the 1976-77 projections submitted to MCU. When the individual university projections are summed, they show an expected system increase in 1976-77 of 1.7% over 1975-76. These projections, however, were based on a December 1 count date while the figures in

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[13] Fiscal full-time equivalent, a measure which embodies a weighting for course load, under the new counting system established for 1976-77.

Table 2-8

Comparison of Total Eligible[4] FTE Undergraduate Enrolments, 1973-1976

University	1973-74 FTE Enrolment	1974-75 FTE Enrolment	1974-75 % Change	1975-76 FTE Enrolment	1975-76 % Change	1976-77 FTE Enrolment	1976-77 % Change
Brock	3234.5	3426.2	5.9	3739.2	9.1	3731.1[2]	- 0.2
Carleton	10006.0	10231.8	2.3	10898.5	6.5	11130.0[3]	2.1
Guelph	8808.7	9611.1	9.1	9890.9	2.9	9904.0[3]	0.13
Lakehead	3130.3	3094.1	- 1.2	3380.8	9.3	3606.3[3]	6.7
Laurentian[1]	3204.4	3572.4	11.5	3666.9	2.6	3830.2[2]	4.5
Algoma	606.9	594.1	- 2.1	557.4	- 6.2	494.9[2]	-11.2
Nipissing	400.5	498.3	24.4	621.3	24.7	658.2[2]	5.9
Hearst	151.3	167.4	10.6	149.8	-10.5	110.3[2]	-26.4
McMaster[1]	8926.4	9652.8	8.1	10476.0	8.5	10667.0[3]	1.8
Ottawa[1]	10978.5	11907.6	8.5	12567.9	5.5	12719.6[3]	1.2
Queen's	9608.2	9981.6	3.9	10565.4	5.8	10700.0[3]	1.3
Toronto	27848.9	31460.6	13.0	32678.7	3.9	32429.1[3]	- 0.8
Trent	2216.3	2477.3	11.8	2700.8	9.0	2883.9[3]	6.8
Waterloo[1]	11759.3	12186.1	3.6	12814.0	5.2	13362.5[3]	4.3
Western[1]	16795.8	17857.1	6.3	18768.1	5.1	18659.6[3]	- 0.6
Wilfrid Laurier	4175.0	4119.4	- 1.3	4437.8	7.7	4585.5[2]	3.3
Windsor	7476.2	7872.4	5.3	9061.8	15.1	9809.4[2]	8.3
York	14388.7	15124.1	5.1	16041.1	6.1	16716.0[3]	4.2
OISE	42.6	49.6	16.4	47.2	- 4.8	59.5[2]	26.1
Ryerson	8985.5	9412.1	4.7	9882.4	5.0	10209.8[2]	3.3
OCA	-	-	-	1407.7	100.0	1625.1[2]	15.4
Total (Including OCA)	152744.0	163296.1	6.9	174353.7	6.8	177891.9	2.0
(Excluding OCA)	152744.0	163296.1	6.9	172946.0	5.9	176266.8	1.9

1. Including church related at 100% funding in all years
2. FTE enrolment as of November 1, 1976 as reported to MCU
3. Adjusted FTE enrolment on old basis (in response to January 25, 1977 CESP letter)
4. Eligible for funding.

Table 2-8 for universities which did not provide a converted figure in response to the CESP letter were based on a November 1 count date. Bearing in mind that enrolment falls off between November 1 and December 1, the 2% increase of Table 2-8 should be reduced somewhat. This would have the effect of bringing actual 1976-77 FTE undergraduate enrolment almost in line with the projections submitted to MCU.

The decision to predict a 5% increase in the 1976 brief was heavily influenced by the continued growth in applicants to first year experienced by the Ontario Universities' Application Centre at the time the brief was being written. The next section examines first-year undergraduate enrolment in comparison to projections made by the universities to MCU.

2.4.3 1976-77 First-Year Undergraduate Enrolment

In attempting to examine enrolments in first-year undergraduate degree programmes, data comparability problems are again encountered. Statistics on full-time enrolments are available from MCU but are based on the November 1 count date in 1976-77. The Ontario Universities' Application Centre also changed its count date, from October 1 to November 1. While a precise figure cannot be given, it is estimated that first-year enrolment in the Ontario university system increased in 1976-77 by not more than 1%.

It is interesting that this low enrolment growth occurred despite the earlier noted increase in applicants of 5% in 1976-77. In seeking an explanation, universities' projections of first-year undergraduate enrolments for 1976-77 were examined. (It should be pointed out that these projections were submitted to MCU in January, 1976, before any statistics on applicants were available.) The universities' projections showed that a number of the larger universities expected small increases, or even decreases, in 1976-77. The net effect was a zero growth projection for the system as a whole. Actual first-year undergraduate enrolment in 1976-77 was quite close to what had been projected by the universities, despite the fact that historically these university projections have generally been below actual results.

2.4.4 Enrolment Projection for 1977-78

In attempting to predict enrolment levels in 1977-78, a number of factors were examined:

- trends in Year 1 registrants related to Grade 13 enrolments;
- trends in Year 1 registrants in relation to February application statistics;
- Year 1, non-Grade 13 registrants as a proportion of the 18-29 age group; and
- undergraduate enrolment as a proportion of the 18-21 and 18-29 age groups.

Analysis of the above trends would lead to a projected increase in 1977-78 of the same order of magnitude as the increase forecast in the 1976 brief. The analyses do not, however, take into account the apparent shortfall in 1976-77.

A number of plausible reasons may be presented to attempt to explain the enrolment experienced in 1976-77. One may speculate that the "stop-out" phenomenon may have returned in 1976-77 and that "normal" enrolment increases will again be realized in 1977-78. (A variation of this has been noted by a number of universities, which have observed an increase in the numbers of full-time students who drop courses in the Fall and Winter terms, thereby reducing the FFTE count.) There have also been suggestions that above normal increases were seen in 1975-76 and that the average of the 1975-76 and 1976-77 increases represents the normal pattern. A third alternative may be postulated which has serious implications for future system planning: an increasing number of universities are controlling enrolment.

In last year's brief, we presented a hypothetical model in which we demonstrated the effect of stabilizing the enrolments at an undeclared number of universities with a total enrolment of about 70,000 FTE undergraduates. The net effect of the exercise was to show that if 70,000 spaces were controlled, the universities without enrolment ceilings would have to increase enrolments by 23% by

1983-84 in order to meet the projected demand. During this same period of time, demography would suggest an increase in demand of 14% for university admission in Ontario.

In a survey in the Fall of 1976, the COU Committee on Enrolment Statistics and Projections asked universities to respond to an enquiry concerning enrolment policies. Seven universities stated that formal policies to control enrolments were in place; four were considering implementing such policies; and the remaining six appeared to continue to be interested in growth. The results of this survey led us to believe that 90,000 controlled spaces was a more accurate expectation than the hypothetical 70,000 used last year.

With 90,000 as the assumed stabilized enrolment level, the demand on the non-stabilized institutions would increase to a cumulative net growth of over 30% by 1983-84. Given regional variations between demand and the availability of student places, given the problems of financing out-of-town university studies, and given the gap between the desire of "growth" institutions to grow and their capacity to quickly adjust their physical and human resources, it is becoming more and more obvious that such a pattern of growth for the non-stabilized institutions is far from a realistic expectation.[14]

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[14] The Operating Grants Committee notes that if the recommendation of the Blair Commission to permit municipal taxation of university residence space is not fully funded by MCU, the cost of out-of-town studies will increase significantly and further exacerbate the regional variations between demand and the availability of student places.

Despite continuing concern about maintaining current levels of accessibility to post-secondary studies, the financial pressure of recent years has tended to discourage enrolment growth. Even more significant a factor, however, in the determination of institutional enrolment policies has been a growing awareness of the "peak and trough" phenomenon evident in an analysis of demographic data. It would appear that a growing number of institutions, conscious of the problems inherent in declining enrolment and unable to foresee the mechanisms for funding solutions to these problems, are already taking steps to forestall the inevitable implications and complications of allowing enrolment to rise naturally to a peak in the early eighties.

Taking all of the above factors into consideration, the best estimate that can be made at this time is that FTE undergraduate enrolment in the system will increase by 1 to 2% in 1977-78. With respect to the longer term, the Committee feels that serious consideration of an "Ajax Option"[15] may be premature, given the uncertainty which surrounds enrolment trends during the next five years or so.

In arriving at this projection, the analyses, for the most part, have been confined to FTE enrolment statistics. This approach has been taken because it is the FTE figures which are more closely related to funding. There was, however, some concern evident in the deliberations of the Committee at the lack of attention given

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[15] Suggestion of temporary facilities, made by OCUA in the introduction to its Third Annual Report.

to full-time enrolment patterns.

2.4.5 Demographic Projections

The 1977-78 projection has not been based on an estimate of student demand. While demand based on demographic trend analyses may no longer serve for short-term projections, there is still considerable interest in these techniques for longer-term planning. In the 1976 brief enrolment trends to 1992 were projected. Two additional sets of projections have recently been brought to our attention. Statistics Canada has released a draft series of projections to 1986 made by Z. Zsigmond and G. Picot.[16] In addition, in the introduction to its Third Annual Report, OCUA presents enrolment projections to 1990. The Committee on Enrolment Statistics and Projections will be examining long-term enrolment projections in its future deliberations.

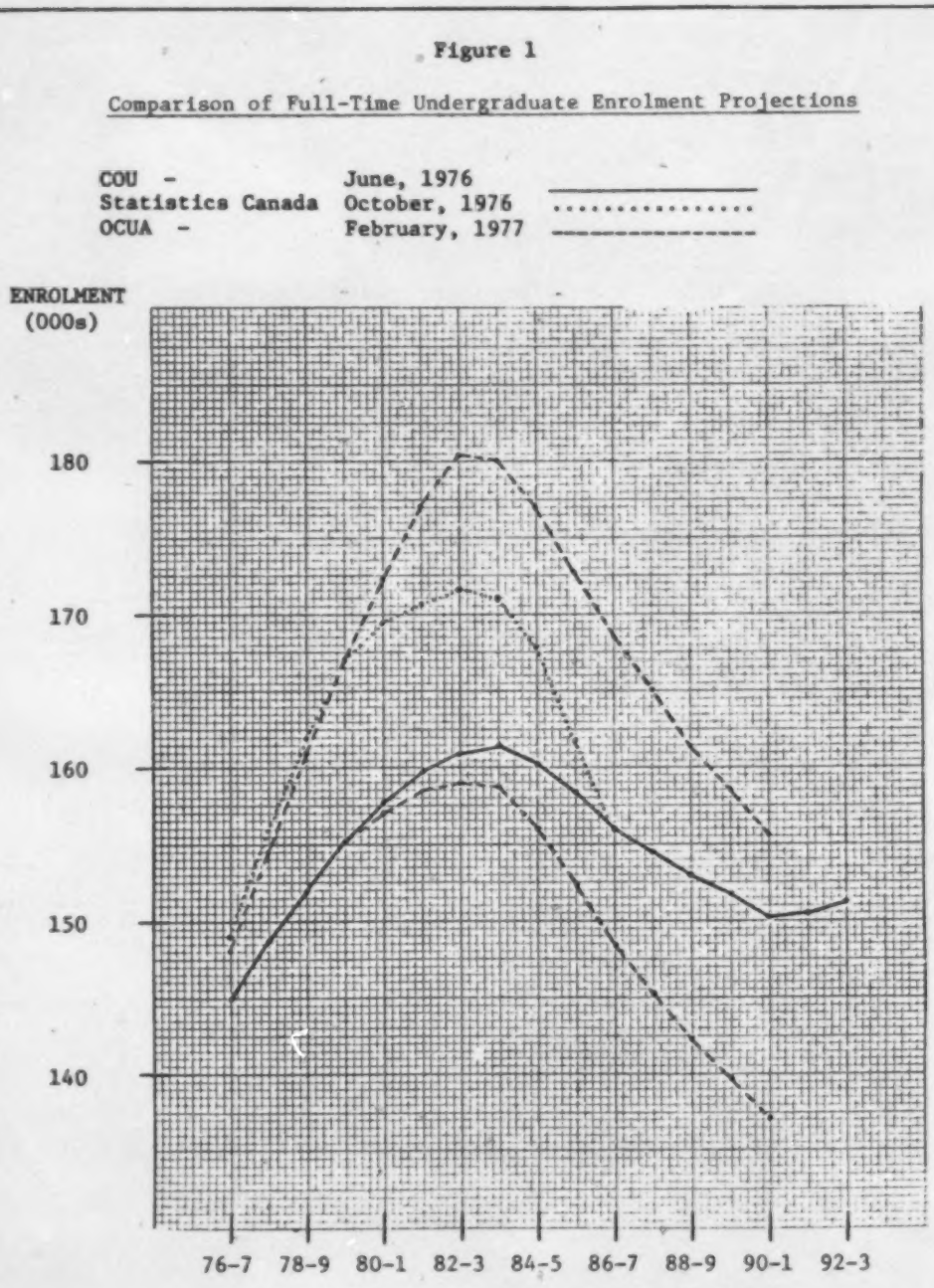
Figure 1 displays projections of demand for full-time undergraduate places. Shown are the "most likely" projections from the 1976 COU brief and the Statistics Canada publication, and the upper and lower extremes produced by OCUA. The four projections are somewhat similar in that enrolment levels are expected to peak in 1982-83 or 1983-84 and then begin to decline. The COU projection continues to decline until 1990-91 and then begins to rise. The Statistics Canada projection is still declining sharply at its final point in

[16] Unpublished document.

1986-87. Both OCUA projections are still declining at their final points in 1990-91.

Figure 1

Comparison of Full-Time Undergraduate Enrolment Projections



The most interesting feature of the projections in Figure 1 is the differences between the maximum enrolment levels reached and the minimum points to which the enrolment subsequently declines. The maximum-minimum spread for the COU projection is of the order of 11,400 full-time students. While none of the other projections show the minimum point, the spread between the maximum and the final point for the Statistics Canada projection is 15,600 full-time students. The corresponding spreads for the upper and lower OCUA projections are 24,800 and 21,900 respectively. Both Statistics Canada and OCUA are projecting maximum-minimum spreads that are much larger than the COU projection. In light of the minimal enrolment increase in 1976-77 and taking into account the factors outlined in the previous section, one must question the applicability of any projections based on demographic trends.

2.5 Excess Capacity Factor

In last year's brief, we questioned OCUA's arbitrary discount of 50% on funds for enrolment growth. Our recommendation was to discount system growth by 35% by relating savings due to semi-fixed and variable costs. In view of the publication of Advisory Memorandum 76-VII, we would suggest that this discount be termed a "stabilization factor". For the moment, given the Minister's acceptance of Advisory Memorandum 76-VII and in the absence of

firm knowledge of how the discount for stabilization is arrived at, the Operating Grants Committee has no other choice but to acknowledge a 50% discount in determining the level of system funding for 1978-79.

Of concern to the Operating Grants Committee, however, are the criteria which will determine the value of this "stabilization factor", particularly in the light of the statement by OCUA that its value will be subject to annual review. We recommend therefore that OCUA make known the principal determinants it will use in conducting such a review.

3.0 OTHER FUNDING CONSIDERATIONS

3.1 Other Revenue

In its funding recommendations, OCUA uses three categories of sources of revenue for universities: 1) formula grants (includes extra-formula grants: bilingualism, supplementary, and northern); 2) tuition and fees; and 3) other revenue. Assumptions are made about the rate of growth expected in tuition and fees and other revenue, that in effect reduce the level of funds provided by government grants. For 1976-77, other revenue was assumed to increase by 10% while for 1977-78 the increase was expected to be 5%.

The Operating Grants Committee undertook a survey to determine the validity of the above assumptions. The results of this survey, presented in Table 3-1, show that the percentage increases expected by OCUA in the "Other Revenue" category are higher than the levels predicted by the universities. It would appear that a revenue shortfall of $2 million will occur in both 1976-77 and 1977-78. The decline of interest rates and a reduction in the amount of funds that

Table 3-1

Results of "Other Revenue" Study
($ thousands)

	1975-76	1976-77	$ Increase	% Increase	1977-78	$ Increase	% Increase
System Total	57,247	60,824	3,577	6.2%	62,551	1,727	2.8%

can be invested seem to account for the limited growth experienced in these funds, and the Committee feels that no increase in these other revenue items should be assumed for 1978-79.

3.2 The Recurrent Question of Supplementary Grants

From the time of its earliest deliberations on this matter in the mid-sixties, COU has taken the position that size, not time, is the principal factor in determining the point at which small universities are able to survive on formula funds alone. This size has variously been set at a point somewhere between 4,000 and 6,000 BIUs.

Perhaps the most thorough collective study done on this matter was that which was summarized in the Batke report of August, 1967 (approved by CPUO[17] in September, 1967). At that time, rapidly increasing enrolments and the availability of capital funds to accommodate growth made "emergence" for all institutions seem within reach. Nonetheless, the authors of the Batke report recognized that preservation of a collective view of high academic standards for the university system as a whole would require sustaining supplementary grants indefinitely should an institution, for any reason, not attain its point of emergence.

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[17] The Committee of Presidents, predecessor to COU.

Neither the Ministry nor the Committee on University Affairs were ever able to accept the possibility of indefinitely providing supplementary funds to "emergent" universities. To have done so, in their view, would have been to remove any incentive to emerge. Indeed, the response of the Ministry to the Batke report in March, 1968 was to put forward a planned phasing-out of emergent grants ending in 1972-73. Circumstances caused this particular plan to be abandoned, but the view that this support must end at a fixed point in time has always been put forward by the Ministry.

In its first distributive advice (Advisory Memorandum 74-II), OCUA recognized that supplementary support related to institutional size could be "based on the reasonable, if not precisely verifiable assumption, that most enrolment related formulas do not recognize the minimum level of fixed costs below which a university simply cannot operate as such." Not withstanding this unconditional statement of support for the principle that small institutions have fixed costs which must be funded, OCUA reversed itself in Advisory Memorandum 75-VII and said that there was "little or no likelihood that supplementary grants to Trent, and for that matter supplementary as distinct from Northern grants to Lakehead and Laurentian, can or should continue indefinitely."

Both Lakehead and Laurentian increased undergraduate enrolments in 1976-77 by significantly more than did the system as a whole. Yet the operating income of those institutions (excluding northern and bilingual grants) rose at a rate less than is required to cover inflationary increases in base costs. Brock finds itself this year with fewer BIUs than when it was receiving supplementary support and Trent, constrained by serious space limitations, cannot grow to the point of "emergence".

Before considering a solution to this problem, let us first abandon, once and for all, the term "emergent" universities. From an academic point of view, the institutions in question emerged some time ago so that one can now talk about their own institutional characters and indeed, their own traditions. They all still face, however, the problem of high cost infrastructure arising from their size. If their enrolments remained static for twenty years and we still expected these institutions to function as universities, they would still face the problem of high cost infrastructures arising from size. Finally, it should be noted that the total of non-formula grants to the provincially-assisted universities represents just slightly more than 1% of the operating income of all institutions, with supplementary support being less than one-third of this latter amount. While reaffirming its belief in the validity of formula distribution of operating funds, the Operating Grants Committee does not feel it unreasonable that one-third of one percent (0.3%) of system funds

should be used to address the problems of institutions for which the basic formula is inadequate.

In order to determine the appropriate level of supplementary support, it is further recommended that COU and OCUA jointly undertake a study of this matter. Should such a study, however, be unable to arrive at detailed recommendations in time for inclusion in funding advice for 1978-79, we recommend that an "allowance for size" be determined as follows:

$$\text{Allowance for Size} = \frac{\text{BIUs} + 5{,}500}{2} \times \text{BIU value} - \text{BOI}$$

or Allowance for Size = 0.25 BOI, whichever is less.

The 5,500 figure cited is what once might have been termed a point of "emergence". In the present perspective, it defines a point below which small universities require additional assistance. Although somewhat arbitrary, the figure can claim the following justification:

1) it falls within the 4,000 - 6,000 range postulated some ten years ago;
2) it falls below the points of emergence defined in the Autumn of 1975 by most of the institutions concerned;
3) it goes a long way towards answering the financial problems of these same institutions; and
4) it is no more arbitrary than any other factor used in the calculation of university support.

The formula for "allowance for size" cited above is expressed simply in terms of BIUs. In this era of a graduate funding freeze, account must now be taken of GFUs. This complication is dealt with as follows:

$$\text{Allowance for Size} = \left(\frac{\text{BIUs}}{\text{BIUs + GFUs}} \times \frac{\text{BIUs + GFUs + 5,500}}{2} \times \text{BIU value}\right) + \left(\frac{\text{GFUs}}{\text{BIUs + GFUs}} \times \frac{\text{BIUs + GFUs + 5,500}}{2} \times \text{GFU value}\right) - \text{BOI}$$

Finally, a comment is in order on the limitation of supplementary funding to 25% of formula BOI. In order to conserve the resources of the system as a whole and to provide safeguards on those resources through a possible enrolment drop in the eighties, the Operating Grants Committee felt such a upper limit imperative. The Committee would seriously question the ultimate viability of any institution that could not cope financially within the framework of its recommendations.

A hypothetical model of this supplementary funding approach, using average enrolment for the years 1974-75 to 1976-77, is presented as Table 3-2. The present distributive methodology and actual enrolment data were used in order to avoid introducing additional variables which could confuse comparison between what is proposed and what OCUA presently provides. The Committee notes that its model provides less supplementary support for Lakehead than was allocated by OCUA

Table 3-2

A Hypothetical Recalculation of 1977-78 Supplementary Grants

	Averaged BIUs + GFUs	Recalculated BIUs + GFUs	OCUA Supplementary Grants	Allowance for Size	Difference + or (-)
Brock	5,394.8	5,447.5	-	132	132
Lakehead	4,978.6	5,239.5	750	657	(93)
Laurentian	4,885.7	5,192.9	500	773	273
Trent	3,364.4	4,432.2	1,400	2,123[1]	723
			2,650	3,685	1,035

1. In Trent's case the 0.25 BOI upper limit is operative. The alternative calculation would provide $2.695 million.

for 1977-78. However, it is more than likely that this model would provide more for Lakehead in 1978-79 than would a funding methodology based on "moderately accelerating year to year reductions".

4.0 FUNDING RECOMMENDATIONS

Table 4-1 uses the findings and recommendations for changes made earlier in this brief to translate system requirements into dollar increases. These total global funding recommendations attempt to provide funds to (1) meet expected inflation; (2) maintain the present levels of quality and service; and (3) to accommodate an undergraduate enrolment increase of 2%. A brief synopsis of what values were used in each of the calculations is presented below. (If the reader requires a more detailed description of this funding model, OCUA Advisory Memoranda 75-VI and 76-III are the source documents.)

Table 4-1

The COU Estimate of the Cost of the Basic Funding Recommendations
($ millions)

	1 Base Budget 1977-78[1]	2 Inflationary Trend Cost 1978-79	3 Existing Service Level Cost 1978-79	4 Efficiency Factor (Negative)	5 Predicted Enrolment Costs 1978-79	6 Stabilization Factor (Negative)	7 Cost of Basic Objectives 1978-79
Salaries	653.2	39.2	13.1	-1.3	11.8	-5.9	710.1
Fringe Benefits	67.8	5.4	1.8	-0.1	1.2	-0.6	75.5
Non-Salary	194.1	19.2	4.8	-0.4	3.5	-1.7	217.5
TOTAL	913.1	63.8	19.7	-1.8	16.5	-8.2	1,003.1

1. Table 1, p.6, OCUA 76-III, plus $3.5 million for pressing financial need.

Column 1: 1977-78 Base Budget - The OCUA estimate of the costs of funding the basic objectives for 1977-78. (See Advisory Memorandum 76-III, p. 6.)

Column 2: Inflationary Trend Cost 1978-79 - Expected rates of inflation for salaries (6%); fringe benefits (8%); and non-salary items (10%). (See Section 2.1.)

Column 3: Existing Service Level Cost 1978-79 - The OCUA rate for progress through the ranks of 2% on salaries; 2.7% for fringe benefits; and 2.5% for furniture and equipment replacement. (See Section 2.2.)

Column 4: Efficiency Factor - Discounts for productivity are assessed at 0.2% (instead of 1% as per OCUA). (See Section 2.3.)

Column 5: Predicted Enrolment Costs 1978-79 - Section 2.4 projects a possible 2% growth in undergraduate enrolment or 1.8% in total enrolment.

Column 6: Stabilization Factor - Discounts system enrolment growth by 50%. (See Section 2.5.)

Column 7: Cost of Basic Objectives 1978-79 - The sum of the positive and negative factors added to 1977-78 base budget.

The total recommended increase for 1978-79 over 1977-78 is $90.0 million, which represents an increase of 9.9% in operating funds for the Ontario universities. If, as the government seems to have indicated, there will not be a tuition fee increase for 1978-79 and if, as appears likely, growth in other revenues will be negligible, it would appear that almost the entire amount of the requisite increase will have to be funded by government grants.

:tk

April 26, 1977.

COUNCIL OF ONTARIO UNIVERSITIES
CONSEIL DES UNIVERSITÉS DE L'ONTARIO
130 ST. GEORGE STREET, SUITE 8039
TORONTO, ONTARIO M5S 2T4
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October 14, 1976.

Mr. Willis L. Blair,
Chairman,
Commission to Review Proposals for
Property Tax Reform in Ontario,
5th Floor,
Frost Building South,
Queen's Park,
Toronto, Ontario

Dear Mr. Blair:

The Council of Ontario Universities wishes to express its concern over certain aspects of the proposals on property tax reform contained in the Ontario Budget Paper "E", 1976.

First, we wish to recall that the universities of Ontario are on record as favouring termination of exemption on property taxation for universities, on the condition that there be fully offsetting grants from the province. This position was taken by the Committee of Presidents of Universities of Ontario, predecessor to this organization, and conveyed to the then Minister of University Affairs, the Honourable W. G. Davis, in the form of the following resolution:

> That the universities of Ontario support the recommendation of the Smith Committee on Taxation that exemption on property taxation for universities be terminated and that Provincial grants be made to municipalities on behalf of approved institutions of higher learning in lieu of tax exemption, on condition that all such institutions in Ontario of a kind that now enjoy exemption from municipal taxes be recognized by the Province as "approved institutions" for the purpose of grants in lieu.

Subsequently, this resolution was ratified by university boards of governors. Under present arrangements all Ontario universities receive a specific grant from the province, equivalent to $50.00 per full-time student, which is remitted to the municipalities in lieu of taxes.

Proposal No. 14 "Grant Supported Bodies", sounds reasonable by itself. It is stated that they "will be allowed to include their property tax payments as allowable expenses for grant purposes". However, the proposal is accompanied by the ominous note: "Because the grant rates may not be 100 percent, there may be a net increase in the cost to be raised from other sources."

Universities have virtually no controllable sources of income which could offset increased costs. Above 80% of university income comes from provincial operating grants. Of the remainder, 15% of total income is raised by tuition fees, which are effectively controlled by government under the formula system. The universities really only "control" about 5% of their income, and this is drawn from various sources such as bequests and investment income.

Mr. Willis L. Blair October 14, 1976.

Therefore, if the universities are forced to provide money from other sources, it will, of necessity, be drawn from the resources required for regular operating purposes. This would seriously affect current programmes and long-range plans. We have recently assembled evidence that government policy since 1971 has reduced per student grants to the universities, in real terms, by 21%. We doubt that this experience has been paralleled by any other publicly supported sector. It is against this background that we view with the greatest alarm any possibility that the universities may be required to meet additional expenses without fully offsetting guaranteed revenue.

The acceptance by the universities of the provincial government's policy decision to tax university property is based on the condition that such taxation be fully funded by separate government grants.

Full offsetting will require that the grants be maintained separately, since the effect of property taxation reform will vary considerably from one university to another. Universities vary in the extent of services received from the municipalities, and in the percentage of the local tax base which they comprise, and therefore the taxation is likely to vary considerably. Unless the principle of full compensatory grants is maintained the results will inevitably be uneven and inequitable among the universities. On a technical, but nonetheless important, point, full compensation requires that the timing of grants coincide with the requirement of payment by the municipalities. At present, in some cases the municipality requires full payment on a specified date, while the universities receive their tax grant from the province in 24 semi-monthly installments during their fiscal year. This difference in timing results in substantial out-of-pocket carrying charges to these universities -- a situation which the Council feels should be resolved by the Commission.

This submission has attempted to summarize briefly the common concerns of the universities. The Commission will be hearing from a number of the individual institutions expressing their particular concerns. We have restricted comments in this submission to the matters which are most important to the universities; individual institutional briefs will be raising other important points.

The Council urges the Commission to consider this and other university briefs with care and recommends that the present policy of separate and full compensatory grants for municipal taxation be maintained.

Sincerely,

John B. Macdonald
Executive Director

JBM:tk

cc: Honourable H. C. Parrott
Dr. J. S. Dupré

COUNCIL OF ONTARIO UNIVERSITIES
CONSEIL DES UNIVERSITÉS DE L'ONTARIO

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December 8, 1976.

Mr. Willis L. Blair,
Chairman,
Commission to Review Proposals for
Property Tax Reform in Ontario,
Fifth Floor,
Frost Building South,
Queen's Park,
Toronto, Ontario

Dear Mr. Blair:

On October 14, 1976, the Council of Ontario Universities expressed its concern over certain aspects of the proposals on property tax reform contained in the Ontario Budget Paper "E", 1976.

The Council has reviewed the contents of briefs submitted to the Commission by the individual universities, and wishes to draw to your attention some additional specific concerns shared by the institutions.

As is pointed out in the original brief, while the universities have generally concurred with the principle of municipal taxation of universities, concurrence was based on the understanding that the costs would be fully offset by provincial grants. Maintenance of this principle is essential to the universities. Our earlier submission did not, however, deal with the question of the appropriate criteria to determine levels of taxation. We wish now to point out, first of all, that there are real difficulties in the way of setting a market value assessment, and secondly, that a full rate of taxation may not be justified.

The first problem is with the meaning of market value assessment of university property. In brief, the question is how this concept (variously interpreted) can be applied to an institution where both the property and the buildings do not in general lend themselves to alternative uses; therefore, a market may not exist. Market value is commonly established by considering the sale of comparable properties, an inappropriate criterion as applied to a university. Other criteria mentioned in the university briefs were: valuation based on anticipated earnings, which does not apply to the universities; and valuation based on replacement costs, which would automatically result in a valuation at the highest and probably the most impractical level. It is suggested that the market value concept needs modification, and should be replaced by a specific definition to determine explicitly how university facilities should be valued for taxation purposes. In this connection, it should be noted that some institutions had been unable to find out what their assessment might be, and therefore found it difficult to suggest creative and positive methods whereby the tax situation with the municipality could be resolved. Some institutions provided examples of the potential increase in taxation based on assessments computed by using specific local criteria. The Commission will have noticed these approaches, but we would particularly draw to your attention the common feature of uncertainty about market value assessment.

Our second area of concern is with the appropriateness of a full rate of taxation. The university provides to its local community a range of services which do not otherwise have to be provided by the community, and many municipal services provided to the "normal" taxpayer are not provided to the university.

1. University services to the community

Clearly, numerous benefits accrue to a municipality from the presence of a university within its boundaries. While some of these benefits might be intangible, others are of a service nature. While the facilities provided to the public by a university could be extensively catalogued, it is perhaps sufficient to select the following examples:

- presence of a university in a community as an attraction to industry and business;
- ecological and environmental contribution to the public in terms, for example, of green belt and park land, and urban preservation;
- special facilities provided to the public for recreational and cultural activities, professional counselling, meeting places and residences for conferences (often, it might be noted, provided at less than equivalent rates).

2. Self-service aspects of the university

It must be stressed that many universities provide for themselves a range of services normally supplied by the municipalities, including: campus police, garbage pickup, roads and sidewalks, street lighting, snow removal, and sewer systems. These self-services could also be catalogued in detail. To the extent to which taxes represent payment for services, the universities have a solid basis for arguing for reduced taxation.

While we have focussed here on certain special features of the proposals as they affect the universities, there have emerged a number of other distinctive but common concerns: the taxation of student residences; the variety of land holdings within and among universities which lend themselves to consideration under other of the proposals than no. 14 in Budget Paper "E"; the difficulty, for tax purposes, of quantifying buildings and facilities used for legitimate purposes ancillary to the fulfillment of a university's function; and the nature of university acts which generally specify tax exemption.

In our earlier brief, we argued for the maintenance of separate grants to the universities for municipal taxation. Clearly the above concerns must be dealt with on a system basis with the province setting the guidelines, in order to provide equity among the municipalities and to protect the interests of the provincial government. Otherwise there would result a system of indirect taxation of the province by the municipalities with no provincial control.

We would be pleased to provide more extensive documentation on these points if the Commission would find it useful.

The Commission's consideration of this additional expression of concern in conjunction with its attention to the individual university briefs will be appreciated.

Sincerely,

John B. Macdonald
Executive Director

cc: Honourable H. C. Parrott
Dr. J. S. Dupré